

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 1973		2. REPORT TYPE		3. DATES COVERED 00-00-1973 to 00-00-1973	
4. TITLE AND SUBTITLE The Identity of Aedes Species Unknown of Knight and Hull 1953				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Southeast Asia Mosquito Project, Smithsonian Institution, Washington, DC, 20560				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 2	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

The Identity of Aedes Species
Unknown of Knight and Hull 1953

E. L. Peyton
Southeast Asia Mosquito Project
Smithsonian Institution
Washington, D. C. 20560*

Under the general heading of "Aedes of Unknown Subgenera", Knight and Hull (1953) presented the distribution and a discussion of Aedes(?) platylepidus Knight and Hull, and a complete description of the larva of "Aedes species unknown". The description of the unknown species was based on three whole larvae from Palawan and Balabac, Philippine Islands. They suggested the larvae might possibly be either Aedes platylepidus or Heizmannia scintillans Ludlow.

Mattingly (1957) suggested that the larva was more likely an Aedes than a Heizmannia, and in (1959) he included platylepidus in the subgenus Diceromyia of Aedes, but expressed doubt that the larvae belonged to this species. Reinert (1970) pointed out that the larvae did not compare favorably with other species of Diceromyia of Southeast Asia. Furthermore, he noted that the larval collection sites (a metal container and a palm frond on the ground) were more like those of Stegomyia than Diceromyia.

All of the above assumptions were based on the description of the larvae in Knight and Hull. Knight and Hull indicated that one of the Palawan larvae was deposited in the USNM as Aedes species #46 and the other two were retained in the Knight collection. Reinert (1970) was unable to locate these specimens when he reviewed the Diceromyia. To date, the identity of Aedes species unknown of Knight and Hull (1953) has remained a mystery.

Recently, I found a larval slide in the SEAMP collection with data conforming to that given in Knight and Hull for the Palawan specimens, and labeled Aedes species unknown #46, 854E. The penmanship also conforms to other Knight, Rozeboom, Laffoon WWII Philippine material in the USNM. There is little doubt that this is the specimen referred to in Knight and Hull. This specimen is not an Aedes or Heizmannia, but a specimen of Uranotaenia (Pseudoficalbia) obscura Edwards. The specimen is not a fully developed 4th stage larva, for the plate of the 8th abdominal segment is quite faint. There is a complete absence of a maxillary suture, which automatically excludes it from Aedes or Heizmannia. This character was not well known until recently. There is, however, a slight discrepancy between specimen #46 and its description. Knight and Hull list the pecten

* This work was supported by Research Contract No. DA-49-193-MD-2672 from the U. S. Army Medical Research and Development Command, Office of the Surgeon General, Washington, D. C.

teeth as 7-12, but the USNM specimen has 6 on one side and 7 on the other. I have examined many specimens of U. obscura from Southeast Asia and I have never seen one with more than 9 pecten teeth. This suggests that although specimen #46 and the description is of obscura, one of the three specimens could possibly have represented a second species. I accept the theory that Knight and Hull selected the specimen described for deposit in the USNM. Misidentification of U. obscura larvae is not unusual, because they look very much like an Aedes, both in the natural habitat and on close examination. Reinert was unable to locate the specimen because I had earlier (1967-68) removed it from the unidentified material of the USNM and placed it with other material of U. obscura but failed to associate it, until recently, with the publication of Knight and Hull.

ACKNOWLEDGMENT. I extend special thanks to Dr. Botha de Meillon, former Principal Investigator of SEAMP for his support.

LITERATURE CITED

- Knight, K. L. and W. B. Hull. 1953. The Aedes mosquitoes of the Philippine Islands. III. Subgenera Aedimorphus, Banksinella, Aedes, and Cancraedes (Diptera, Culicidae). Pacif. Sci. 8:453-481.
- Mattingly, P. F. 1957. The culicine mosquitoes of the Indomalayan area. II. Genus Heizmannia Ludlow. British Museum (Natural History), London. 57 pp.
- Mattingly, P. F. 1959. The Culicine mosquitoes of Indomalayan area. IV. Genus Aedes Meigen, Subgenera Skusea Theobald, Diceromyia Theobald, Geoskusea Edwards and Christophersiomyia Barraud. British Museum (Natural History), London. 62 pp.
- Reinert, J. F. 1970. Contributions to the mosquito fauna of Southeast Asia. V. Genus Aedes, subgenus Diceromyia Theobald in Southeast Asia. Contr. Amer. Ent. Inst. 5(4):1-43.